

Amendments to the Claims:

1. (Currently Amended) A composition comprising Ccalcium phosphate in the form of granules ~~showing~~ having an x-ray diffraction pattern characteristic of hydroxyapatite, ~~characterized by the fact that~~ wherein at least 90% of the particles are larger than 10 microns and 90% of the particles are smaller than 300 microns, ~~and preferably smaller than 260 microns.~~

2. (Currently Amended) Calcium Pphosphate according to claim 1, ~~characterized by the fact that~~ wherein the size of the granules expressed by the median diameter (d_{50}) is between 100 μm and 250 μm ~~and preferably between 150 μm and 190 μm .~~

3. (Currently Amended) Calcium Pphosphate according to claim 1, ~~characterized by the fact that~~ wherein the apparent noncompressed density (~~nonecompressed~~) of the granules is at least 0.6 ~~and is preferably situated between 0.6 and 1.0, and still more preferentially between 0.68 and 0.72.~~

4. (Currently Amended) Calcium Pphosphate according to claim 1, ~~characterized by the fact [that]~~ wherein the apparent compressed density (~~compressed~~) of the granules is at least 0.7 ~~and is preferably between 0.7 and 1.1, and still more preferentially between 0.76 and 0.82.~~

5. (Currently Amended) Calcium Pphosphate according to claim 1, ~~characterized by the fact that it advantageously has~~ wherein the calcium phosphate granules have a BET specific surface area of between 10 and 100 m^2/g ~~and preferably between 50 and 80 m^2/g .~~

Claims 6-8 (Cancelled).

9. (Currently Amended) Calcium Pphosphate according to claim & 1, ~~characterized by the fact that it~~ wherein the calcium phosphate has the following compressibility profile:

- from 15 to 40 KPa for a compression of 30 KN,
- from 10 to 25 KPa for a compression of 20 KN,
- from 3 to 10 KPa for a compression of 10 KN.

10. (Currently Amended) Calcium Pphosphate according to claim 1, ~~characterized by the fact that it~~ wherein the calcium phosphate has a rate of disintegration in water of less than 60 seconds, ~~preferably less than 25 seconds and still more preferentially between 5 and 20 seconds.~~

11. (Currently Amended) Calcium Pphosphate according to claim 1, ~~further characterized by the fact that it conforms to~~ wherein the calcium phosphate has the following formula:



~~in said formula,~~ where x varies between 0 and 1 ~~and preferably between 0.1 and 0.5.~~

12. (Currently Amended) A ~~preparation~~ process for preparation of a calcium phosphate ~~in the form of granules showing~~ having a hydroxyapatite x-ray diffraction pattern ~~described in one of claims 1 to 11, characterized by the fact that it comprises~~ comprising (a) treating a brushite dicalcium phosphate suspension having a particle size such that 90% of the particles are smaller than 300 microns, ~~and preferably smaller than 260 microns,~~ and 90% of them are larger than 10 microns, ~~by means of~~ with a basic solution, and (b) maintaining keeping the pH of the suspension at least at 7.0, for a period of time sufficient to permit the transformation of brushite calcium phosphate into hydroxyapatite calcium phosphate.

13. (Currently Amended) The process according to claim 12, ~~characterized by the fact that~~ wherein the size of the particles of brushite dicalcium phosphate is such that the median diameter (d_{50}) is between 100 μm and 250 μm ~~and preferably between 150 μm and 190 μm .~~

14. (Currently Amended) The process according to claim 12, ~~characterized in that~~ wherein the base used in the basic solution is chosen selected from among the group consisting of: NaOH, KOH, and NH₄OH.

15. (Currently Amended) The process according to claim 12, ~~characterized by the fact that~~ wherein the pH of the hydrolysis reaction of the brushite dicalcium phosphate suspension with an aqueous solution is maintained kept constant between 7.0 and 10.0 and preferably between 8.0 and 8.5.

16. (Currently Amended) The process according to claim 12, ~~characterized by the fact [that]~~ wherein the reaction temperature of the brushite dicalcium phosphate suspension is maintained at greater is higher than ambient temperature, preferably higher than 50°C during the reaction with the basic solution -and still more preferentially between 60 °C and 100 °C.

17. (Currently Amended) The process according to claim 16, ~~characterized by the fact [that]~~ wherein the reaction temperature of the brushite dicalcium phosphate suspension is maintained at is situated at approximately 90 °C during the reaction with the basic solution.

18. (Currently Amended) The process according to claim 12, ~~characterized by the fact that~~ wherein a sufficient volume of the base quantity used is such that it represents solution is added to achieve 80 to 110% of the stoichiometric quantity expressed with respect to the brushite dicalcium phosphate.

19. (Currently Amended) The process according to claim 12, ~~characterized by the fact that~~ wherein the aqueous brushite dicalcium phosphate suspension is first heated to the chosen reaction temperature then the base solution is introduced while regulating the pH.

20. (Currently Amended) The process according to claim 12, ~~characterized by the fact that~~ wherein first the base solution is added so as to regulate the pH and then the medium is heated to the chosen reaction temperature.

21. (Currently Amended) The process according to claim 12 ~~one of the claims 19 and 20, characterized by the fact that~~ wherein the basic solution is added progressively while monitoring the pH to maintain the pH of the suspension within a predefined range. ~~in a progressive manner, i.e., in proportion to the progression of the reaction while keeping the pH value in the predefined zone.~~

22. (Currently Amended) The process according to claim 12, ~~characterized by the fact that~~ further comprising the step of separating the hydroxyapatite calcium phosphate is ~~separated~~ from the aqueous solution, ~~preferably by~~ one of filtration or centrifugation.

23. (Currently Amended) The process according to claim 12, ~~characterized by the fact that~~ further comprising the step of drying the hydroxyapatite calcium phosphate ~~is dried~~ at a temperature between 80 and 120 °C ~~and preferably approximately 110 °C.~~

Claims 24-33 (Cancelled).